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7 BEFORE THE STATE OF WASHINGTON
8 ENERGY FACILITY SITE EVALUATION COUNCIL

9 IN RE APPLICATION NO. 96-1)

10 OLYMPIC PIPE LINE COMPANY:)
11 CROSS CASCADE PIPELINE PROJECT)
12 _____)

13
14 EXHIBIT _____ (AG-T)

15 REBUTTAL TESTIMONY OF ALEXANDER GRIEVE

16 ISSUE:

17 SPONSOR: OLYMPIC PIPE LINE COMPANY
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1 **Q. State your name.**

2 A. Alexander "Al" Grieve
3 301-116th Ave. S.E. Suite 550
4 Bellevue, Washington 98004

5 **Q. Where are you employed and what is your position?**

6 A. I am a Senior Associate at H.W. Lochner.

7 **Q. What is H.W. Lochner?**

8 A. H.W. Lochner is a national transportation engineering, and transportation planning firm founded
9 in 1941.

10 **Q. Summarize your professional experience.**

11 A. I am a professional civil engineer licensed in Alaska, Arizona, Idaho, Oregon, Nevada and
12 Washington. I have over 33 years of experience encompassing a broad spectrum of civil/transportation
13 projects. This includes 11 years with the DOT, 7 years as Assistant Director Public Works/Engineering
14 Director for Snohomish County; 15 years as Senior Project Manager in private engineering consulting
15 practice, including currently serving as Office Manager for H.W. Lochner's Bellevue office. A more
16 detailed list of projects with which I have been involved is attached hereto as Exhibit AG-1.

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18 I am currently Vice President and on the Board of Directors of the Snohomish County
19 Committee for Improved Transportation (SCCIT). I am also the current Secretary of the Washington
20 State Chapter of the American Public Works Association. I previously served on the Steering committee
21 to WSDOT for preparation of the Statewide Transportation Policy Plan and was the Chairman of the
22 Subcommittee that prepared the Intermodal Transportation Policy element to the WSDOT's Statewide
23 Transportation Policy Plan.
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25 **Q. What is your educational background?**

1 A. I have a B.S. in Civil Engineering from Purdue University.

2 **Q. To which prefiled testimony are you responding?**

3 A. I am responding to the remarks of Mark Pedersen who is presenting the testimony in the Shapiro
4 report. For the convenience of the Council, the relevant section of the Shapiro report § h (Traffic and
5 Transportation) is attached hereto as Exhibit AG-2. The comments in the Shapiro report are also
6 repeated, virtually verbatim, by county representatives including, Damien Hooper (Grant County); Peter
7 Comenzo (Grant County); Dee Caputo (Adams County). These comments are also appended hereto as
8 Exhibit AG-3.
9

10 **Q. What materials did you consider to prepare this rebuttal testimony?**

11 A. Sections of the Application and DEIS that pertain to the transportation issues; and the relevant
12 pretrial testimony.
13

14 **Q. How did Lochner analyze traffic issues associated with the project?**

15 A. Lochner collected existing average daily traffic (ADT) volumes from the various county public
16 works departments and WSDOT, and compared these ADT volumes to the practical capacities of the
17 various roadways to determine the level of service (LOS), *i.e.* a measure of the amount of traffic
18 congestion. Six LOS categories are used to describe the performance level of a transportation system.
19 These LOS categories range from **LOS A** (no congestion) through **LOS F** (significant congestion).
20 **LOS C** is a generally accepted level of service by transportation professionals for rural roads. The
21 WSDOT is currently using LOS C as their LOS goal for state highways through rural areas. **LOS E** is
22 the point where the traffic demand on the roadway is equal to the capacity of the roadway. It was
23 determined that most of these roadways providing access to the pipeline have low volumes and that the
24 temporary additional volumes added during the construction and operation of the pipeline will not cause
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1 these roadways to reach capacity. In fact, most of these roadways will have a **LOS C** or better even
2 during construction and operation of the pipeline. In short, the traffic impact of construction and
3 operation falls below the capacity of the roadways that will be utilized for the project.

4 **Q. If the project is approved, will OPL do additional work before commencing construction?**

5 A. Yes. OPL has committed to preparation of a Construction Transportation Management Plan
6 (CTMP), which will specifically address issues such as distribution of materials, construction zone
7 safety, access to construction staging areas, maintenance of traffic methods, and special use permits.
8 The CTMP must still be approved before construction can begin.

10 **Q. What is Lochner's opinion of the traffic impacts associated with construction and**
11 **operation of the pipeline?**

12 A. Lochner determined that traffic impacts associated with construction and operation of the
13 pipeline would be minimal and primarily the result of construction. We considered three types of traffic
14 impacts associated with construction of the pipeline.

16 First, traffic on local roads will temporarily be increased because of the travel associated with
17 construction workers. This impact, however, is expected to be slight. The maximum number of workers
18 for any spread area is only about 375. This is expected to add a limited amount of temporary traffic
19 volume on the existing roads. In addition, OPL will be providing incentives to encourage car pooling.
20 Moreover, there are the inherent incentives of convenience, practicality and social interaction for the
21 construction workers to car pool because in many cases they will be living and working together.

23 Second, transporting materials and equipment to the job sites will add some traffic on local
24 roads. The distribution of materials and equipment, under any set of assumptions, however, is extremely
25 low.

1 Further, there is excess capacity on the roads in proximity to the pipeline and the expected
2 additional traffic from construction workers and material hauling for the pipeline is so small that it will
3 not cause traffic on these roadways to reach capacity.

4 Third, the temporary interruptions and delays to existing traffic on local and county roads will be
5 caused by building the pipeline across and along these roadways. Even these traffic impacts associated
6 with building the pipeline across and along roadways will be minor. For major roadways, the
7 construction of the pipeline will use current underground boring or jacking methods, which will have
8 minimum or no impact on traffic because the surface of the road is unaffected during this process. For
9 county and local roads, it is standard roadway construction practice to maintain at least a one-way travel
10 lane through the construction zone using flaggers. In most cases, constructing a trench across these
11 county and local roads are anticipated to take less than one day. For trenching work parallel to, or in few
12 cases within the roadway itself, the construction is anticipated to take ten days or less.

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15 After the pipeline is constructed, it is anticipated that only 6-7 full time employees will be
16 involved in regular maintenance and operations at the Kittitas terminal. The traffic impacts associated
17 with such a small number of workers over the vast geographic area covered by the pipeline is expected
18 to be minor.

19
20 **Q. The Shapiro report attached to Mark Pedersen's testimony report states that traffic**
21 **volumes have been underestimated. Do you agree?**

22 A. No. The Shapiro report makes this statement but provides no data or reasoning to back it up. It
23 appears that Shapiro is simply relying on trip generation estimates that are not specific to either this
24 project, or pipeline projects generally. By contrast, to analyze traffic volume Lochner utilized the
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1 specific information on the number of workers and the construction techniques that OPL developed as
2 part of the project construction program.

3 **Q. Shapiro questions some of the assumptions used to calculate traffic impacts. Are changes**
4 **to these assumptions material?**

5 A. No. For most of these roads less than 20% of available capacity is being used so even changes as
6 radical as 100% in the assumptions would not change the traffic impact conclusions stated in the
7 Application. Indeed, the Shapiro report itself, with regard to the construction related traffic, states:
8 “Discussion on affected environment or existing conditions is inadequate. However, the magnitude of
9 trips is not great and *from a capacity view, impacts should be minor.*” (Emphasis added). In light of this
10 concession a more detailed traffic analysis does not seem to be warranted.
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12 **Q. Is it necessary to heed the Shapiro report’s suggestion to revise and expand the**
13 **transportation text in the Application because it focuses on the construction areas for the**
14 **pipeline versus the communities?**

15 A. No. It is not anticipated that any new housing facilities will be constructed for the project.
16 Workers will use existing lodging facilities, currently located along the pipeline route. The traffic
17 associated with the use of these existing facilities is presumably to be already factored into local plans
18 for transportation infrastructure.
19

20 **Q. What about the Shapiro report’s concern about of the level of service definition used in the**
21 **Application?**

22 A. There are more up to date versions available from the 1994 version and the 1997 supplement of
23 the Highway Capacity Manual. The update of these definitions, however, does not change H.W.
24 Lochner’s conclusions.
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DATED this 24th day of February, 1999.

Alexander Grieve